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NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 03/11/2008

McCarthy Tetrault, LLP Suite 4700 Toronto Dominion Bank Tower Box 48

Toronto, ON M5K 1E6 CANADA

EXAMINER RAO, ANAND SHASHIKANT ARTINE PAPER NUMBER

2621 DATE MAILED: 03/11/2008

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/722.474 | 11/28/2003 | Anthony Joch | 178827-336070 | 7988 |

TITLE OF INVENTION: LOW-COMPLEXITY MOTION VECTOR PREDICTION FOR VIDEO CODEC WITH TWO LISTS OF REFERENCE

PICTURES

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO | \$1440 | \$300 | \$0 | \$1740 | 06/11/2008 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED.</u> THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

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B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

| INSTRUCTIONS: This f appropriate. All further c indicated unless corrected maintenance fee notification | form should be used for orrespondence including to below or directed oth ons. | or tran g the l crwise | smitting the ISSU Patent, advance or in Block 1, by (a | | | | | | | |
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| 7590 03/11/2908 McCarthy Tetrault, LLP Suite 4700 Toronto Dominion Bank Tower | | | | | Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273–2885, on the date indicated below. | | | | | |
| Box 48 Toronto, ON M51 | K 1F6 | | | | | | | | | (Depositor's name) |
| CANADA | | | | | | | | | | (Signature) |
| | | | | l | | | | | | (Date) |
| APPLICATION NO. | FILING DATE | | | FIRST NAMED INVENT | OR | | ATTO | RNEY DOCKET NO. | CC | ONFIRMATION NO. |
| 10/722,474 | 1 I/28/2003 | | | Anthony Joch | | | 1 | 78827-336070 | | 7988 |
| TITLE OF INVENTION PICTURES | | | | | | | | | ERE | |
| APPLN, TYPE | SMALL ENTITY | IS | SUE FEE DUE | PUBLICATION FEE D | UE | PREV. PAID ISSUE | FEE | TOTAL FEE(S) DUE | \perp | DATE DUE |
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| EXAMI | NER | | ART UNIT | CLASS-SUBCLASS | \neg | | | | | |
| RAO, ANAND S | HASHIKANT | | 262I | 375-240160 | _ | | | | | |
| 1. Change of correspondence address or indication of Tec Address' (27 TeR 1.363). ☐ Change of correspondence address (or Change of Correspondence Address' from PTO/SB/122) attached. ☐ Tec Address' indication (or Tec Address' Indication form PTO/SB/122) attached. ☐ Tec Address' indication (or Tec Address' Indication form pt/OSB/1247; or 10.00 to 1.00 to | | | | | | | | | | |
| (A) NAME OF ASSIG | | catego | ries (will not be pr | (B) RESIDENCE: (C | | | | | oup e | ntity 🗖 Government |
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| 5. Change in Entity Statu a. Applicant claims | SMALL ENTITY statu | s. See | 37 CFR I.27. | ☐ b. Applicant is no | | | | | | |
| NOTE: The Issue Fee and interest as shown by the re | Publication Fee (if requeereds of the United Sta | iired) v tes Pate | will not be accepted ent and Trademark | I from anyone other th Office. | an th | ne applicant; a regi | stered : | uttorney or agent; or th | ne ass | ignee or other party in |
| Authorized Signature Date | | | | | | | | | | |
| Typed or printed name Registration No | | | | | | | | | | |
| This collection of informat an application. Confidenti- submitting the completed this form and/or suggestio Box 1450, Alexandria, Vir Alexandria, Virginia 2231. | tion is required by 37 C ality is governed by 35 application form to the ns for reducing this bur rginia 22313-1450. DC 3-1450. | FR 1.3 U.S.C. USPT den, st NOT | 11. The information 122 and 37 CFR O. Time will vary sould be sent to the SEND FEES OR O | n is required to obtain 1.14. This collection is depending upon the in Chief Information Of COMPLETED FORMS | or re esti idivi ficei S TO | etain a benefit by the imated to take 12 r idual case. Any co r, U.S. Patent and THIS ADDRESS | he publ ninutes mment Traden | ic which is to file (and to complete, includir s on the amount of tin ark Office, U.S. Dep O TO: Commissioner | i by i ig ga ne ye artme for P | he USPTO to process) hering, preparing, and ou require to complete ent of Commerce, P.O. atents, P.O. Box 1450, |

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| 10/722,474 | 22,474 11/28/2003 Anthony Joch | | 178827-336070 | 7988 | |
| 7. | 590 03/11/2008 | | EXAM | UNER | |
| McCarthy Tetrault, LLP | | | RAO, ANAND SHASHIKANT | | |
| Suite 4700 | | | ART UNIT | PAPER NUMBER | |
| Toronto Dominion Box 48 Toronto, ON M5K | | | 2621 DATE MAILED: 03/11/200 | 8 | |

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 807 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 807 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

| Application No. | Applicant(s) | | | |
|-----------------|--------------|--|--|--|
| 10/722,474 | JOCH ET AL. | | | |
| Examiner | Art Unit | | | |
| Andu S. Pao | 2621 | | | |

| - The MAILNG DATE of this communication appears on the All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMerewith (or previously mailed), a Notice of Allowance (PTOL-85) or other NOTICE OF ALLOWABLITY IS NOT A GRANT OF PATENT RIGHTS. 1 of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPI. | MAINS) CLOSED in this application. If not included appropriate communication will be mailed in due course. THI This application is subject to withdrawal from issue at the initia | | | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|
| 1. This communication is responsive to the Amendment of 1/15/08. | | | | | | |
| 2. ☑ The allowed claim(s) is/are <u>1-20</u> . | | | | | | |
| Acknowledgment is made of a claim for foreign priority under 35 U a) | ceived. ceived in Application No | | | | | |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" of this co noted below. Failure to timely comply will result in ABANDONMENT of tHIS THREE-MONTH PERIOD IS NOT EXTENDABLE. | | | | | | |
| A SUBSTITUTE OATH OR DECLARATION must be submitted. Not INFORMAL PATENT APPLICATION (PTO-152) which gives reason | | | | | | |
| 5. CORRECTED DRAWINGS (as "replacement sheets") must be subr | nitted. | | | | | |
| (a) 🔲 including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached | | | | | | |
| hereto or 2) to Paper No./Mail Date | 1) hereto or 2) to Paper No./Mail Date | | | | | |
| (b) including changes required by the attached Examiner's Amendr Paper No./Mail Date | ment / Comment or in the Office action of | | | | | |
| Identifying indicia such as the application number (see 37 CFR 1.84(c)) she each sheet. Replacement sheet(s) should be labeled as such in the header | | | | | | |
| DEPOSIT OF and/or INFORMATION about the deposit of BIG attached Examiner's comment regarding REQUIREMENT FOR THE | | | | | | |
| Attachment(s) 1. | 5. Notice of Informal Patent Application 6. Interview Summary (PTO-413), Paper No./Mail Date | | | | | |
| 3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date | 7. Examiner's Amendment/Comment | | | | | |
| Examiner's Comment Regarding Requirement for Deposit of Biological Material | ⊠ Examiner's Statement of Reasons for Allowance □ Other | | | | | |

/Andy S. Rao/ Primary Examiner, Art Unit 2621

Application/Control Number: 10/722,474 Page 2

Art Unit: 2621

Allowable Subject Matter

Claims 1-20 are allowed.

Independent claim 1 recites a motion vector prediction method including "...organizing a set of reference pictures into a pair of lists and according to each reference picture within said lists at least one reference index; associating with selected ones of said blocks in said video signal at least one motion vector that references a respective one of said lists, each vector associated with a selected one of the blocks referencing a different list of said lists, each vector defining disposition of said selected one of the blocks relative to a reference picture in the respective one of said lists; and, computing a predicted value for a current vector of said vectors for a current block from vectors of adjacent blocks referencing a same list of reference pictures as the current vector, wherein prediction of a motion vector that selects a reference picture using a first list of reference pictures is not dependent upon motion vectors whose reference pictures are selected using a second list of reference pictures..." which is not anticipated nor obvious over the art of record. Dependent claims 2-20 are allowed for the reasons concerning the independent claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Andy S. Rao whose telephone number is (571)-272-7337. The
examiner can normally be reached on Monday-Friday 8 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571)-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andy S. Rao Primary Examiner Art Unit 2621

asr /Andy S. Rao/ Primary Examiner, Art Unit 2621 February 28, 2008